

ABSTRACT (CURRENTLY AMENDED)

5 A system (1') of tracking camera for acquiring and transmitting, in real time, data representing the position in space, in terms of spatial coordinates and inclination with respect to a reference point, of a video camera (10'), while the camera moves along a trajectory is presented.

10 The data thus acquired, once processed, permit determination of the position and inclination of the images obtained. It consists of two principal subsystems: a module containing an inertial sensing unit (11') to be attached to a professional video camera (10') and a module

15 for data processing using stored software programs (2), communicating with the inertial sensing unit via a connection (112'), either wired or wireless. It has applications in the integration of images captured by the camera with images from other sources and in navigation

20 within a virtual universe.

